December 27, 2002

RE: ALCOA–Warrick Operations 173-16685-00007

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

### **Notice of Decision - Approval**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within eighteen (18) calendar days from the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures FNPERAM.wpd 8/21/02

December 27, 2002

Mr. Melvin W. Lager, Jr. Alcoa Inc.- Warrick Operations P.O. Box 10 Newburgh, IN 47629-0010

Re: 173-16685-00007

Administrative Amendment to

Minor Source Modification T173-12676-00007

Dear Mr. Lager:

Alcoa Inc.- Warrick Operations was issued a Minor Source Modification Permit on October 2, 2000 for one (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) and exhausting to East Silo No. 2, which vents to stack number 379.2. Alcoa Inc.- Warrick Operations has requested to amend the Minor Source Modification Permit No: 173-12676-00007. The request is to amend the final exhaust of one (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) and exhausting to East Silo No. 2, which vents to stack number 379.2. The existing process is exhausted to a cyclone. This process will be converted to be exhausted to a venturi scrubber that exhaust inside the rolling bay building, and does not exhaust directly externally. Venturi Scrubbers typically have a greater particulate capture control efficiency than cyclones and this modification is considered an acceptable change in operation. The submittal request that due to this change there will no longer be external exhaust, therefore making Conditions D.1.5, D.1.6 and C.8 no longer applicable. Additionally, the submittal request that the installation of the venturi scrubber will be considered as a pollution control project per 326 IAC 2-1.1-1(13) and the addition of this system should be a "Notice Only" change per 326 IAC 2-5.5-6(d)(5). In regards to the request for a pollution control project and "Notice Only" change. Per Condition C.3 Permit Amendment or Modification (a) states that 326 IAC 2-7-11 or 326 IAC 2-7-12 shall be used for any modification to permit 173-12676-00007 and not 326 IAC 2-1.1-1 or 326 IAC 2-5.5-6 as requested in the submitted letter. Pursuant to the provisions of 326 IAC 2-7-11 the Minor Source Modification Permit No. 173-12676-00007 is hereby administratively amended as follows. All deleted changes are indicated with strikeout (strikeout) and new additions are indicated with bold type (bold type).

All Office of Air Management and OAM references in the Minor Source Modification 173-12676-00007 have been amended to Office of Air Quality and OAQ respectively. (Office of Air Management Quality, OAMQ)

ALCOA Inc. – Warrick Operations Newburgh, Indiana Permit Reviewer: James Farrell Page 2 of 3 Administrative Amendment No.: 173-16685-00007

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) exhausting to a venturi scrubber which exhausts inside the rolling bay building, and does not exhaust directly externally. and exhausting to East Silo No. 2, which vents to stack number 379.2.

### **SECTION D.1**

### FACILITY OPERATION CONDITIONS(No change)

Facility Description [326 IAC 2-7-5(15)]

One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) **exhausting to a venturi scrubber which exhausts inside the rolling bay building, and does not exhaust directly externally.** <del>and exhausting to East Silo No. 2, which vents to stack number 379.2.</del>

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)](No change)

There are no compliance monitoring requirements for the venturi scrubber that exhausts internally, and not directly externally.

**D.1.5** Visible Emissions Notations

- (a) Visible emission notations of the East Silo No. 2 stack exhaust (stack no. 379.2) from the hot ingot oxide brushing system shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Page 3 of 3 Administrative Amendment No.: 173-16685-00007

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19](No change)

### D.1.5 6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.52, the Permittee shall maintain records of the visible emission notations of the East Silo No. 2 stack exhaust (stack number 397.2) throughput of the hot ingot oxide brushing system.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

### **D.1.6 Reporting Requirements**

(a) To document compliance with Condition D.1.5, the Permittee shall submit Quarterly Report and Quarterly Deviation and Compliance Monitoring Report records of the throughput of the hot ingot oxide brushing system.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this administrative amendment 173-16685-00007 and the entire revised permit 173-12676-00007 to the original Minor Source Modification.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact James Farrell, at (800) 451-6027, press 0 and ask for James Farrell or extension 3-8396, or dial (317) 233-8396.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachment JF

cc: File - Warrick County U.S. EPA, Region V

Warrick County Health Department

Southwest Regional Office

Air Compliance Section Inspector - Dick Sekula

Compliance Data Section - Karen Nowak

Administrative and Development - Lisa Lawrence Technical Support and Modeling - Michele Boner

# PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

### ALCOA Inc. – Warrick Operations Junction State Routes 61 & 66 Newburgh, Indiana 47630

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Administrative Amendment 173-16685 to Minor Source Modification T173-12676-00007, issued on October 2, 2000.		
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 27, 2002	

Minor Source Modification No.: 173-12676-00007

### TABLE OF CONTENTS

Α	SC	UI	RCE	SU	MM	ARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

### B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-7-1]
- B.3 Effective Date of the Permit [IC13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

### C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Operation of Equipment [326 IAC 2-7-6(6)]
- C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]
- C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.8 Compliance Monitoring Plan Failure to Take Response Steps
- C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
- C.10 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.11 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

### D.1 FACILITY OPERATION CONDITIONS – Hot Ingot Oxide Brushing System

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Particulate Matter (PM) [326 IAC 6-1-2]
- D.1.2 Emissions Limitations
- D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2][40 CFR 52.21]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.5 Record Keeping Requirements
- D.1.6 Reporting Requirements

Certification

**Quarterly Report** 

**Quarterly Deviation and Compliance Monitoring Report** 

ALCOA Inc. – Warrick Operations Newburgh, Indiana Permit Reviewer: Kimberly Titzer Administrative Amendment 173-16685-00007

Amendment by: James Farrell

Minor Source Modification No.: 173-12676-00007

Page 3 of 16

### **SECTION A**

#### SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary aluminum production facility.

Responsible Official: Mr. Melvin W. Lager, Jr.

Source Address: Junction State Routes 66 and 61, Newburgh, Indiana 47629-0010

Mailing Address: P.O. Box 10, Newburgh, Indiana 47629-0010

Phone Number: 812-853-6111 SIC Code: 3334, 3352 County Location: Warrick

County Status: Attainment for all criteria pollutants, except Unclassifiable for Sulfur

Dioxide (SO<sub>2</sub>)

Source Status: Part 70 Permit Program

Major Source, under PSD Rules;

Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]

[326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) exhausting to a venturi scrubber which exhausts inside the rolling bay building, and does not exhaust directly externally.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

Minor Source Modification No.: 173-12676-00007

Page 4 of 16

### SECTION B GENERAL CONSTRUCTION CONDITIONS

### B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

### B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

Minor Source Modification No.: 173-12676-00007

Page 5 of 16

### **SECTION C**

### **GENERAL OPERATION CONDITIONS**

### C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this approval, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
  - (a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
    - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP=s shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

Minor Source Modification No.: 173-12676-00007

Page 6 of 16

### C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.
- (b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the Aresponsible official@as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

### C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this approval:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### Testing Requirements [326 IAC 2-7-6(1)]

### C.5 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ. A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

Minor Source Modification No.: 173-12676-00007

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

### Compliance Requirements [326 IAC 2-1.1-11]

### C.6 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

### Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

All monitoring and record keeping requirements shall be implemented when operation begins. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

### Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.8 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]
  - (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can either be an entirely new document, consisting in whole of information contained in other documents, or consisting of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates, by reference, information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan, the documents in which the information is found. The elements of the compliance monitoring plan are:
    - (1) This condition;
    - (2) The Compliance Determination Requirements in Section D of this approval;
    - (3) The Compliance Monitoring Requirements in Section D of this approval;

ALCOA Inc. – Warrick Operations Newburgh, Indiana Permit Reviewer: Kimberly Titzer Administrative Amendment 173-16685-00007 Amendment by: James Farrell

Minor Source Modification No.: 173-12676-00007

Page 8 of 16

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

- (5) An Operation, Maintenance & Monitoring Plan pursuant to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production.
- (b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response shall constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned or is returning to operating within Anormal@ parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
  - (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
  - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

ALCOA Inc. – Warrick Operations Newburgh, Indiana Permit Reviewer: Kimberly Titzer

Minor Source Modification No.: 173-12676-00007

Page 9 of 16

## C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C -Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

The documents submitted pursuant to this condition do not require the certification by the Aresponsible official@as defined by 326 IAC 2-7-1(34).

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

### C.10 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used:
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this approval;
  - (2) All data, electronic or otherwise, for continuous monitoring instrumentation;

Minor Source Modification No.: 173-12676-00007

- (3) All calibration and maintenance records;
- (4) Records of preventive maintenance
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

### C.11 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the Aresponsible official@as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
  - Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the Aresponsible official@as defined by 326 IAC 2-7-1(34).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the Aresponsible official@as defined by 326 IAC 2-7-1(34).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Minor Source Modification No.: 173-12676-00007

Page 11 of 16

#### SECTION D.1

### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) exhausting to a venturi scrubber which exhausts inside the rolling bay building, and does not exhaust directly externally.

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

### D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the hot ingot oxide brushing system shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150.0 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 55.0 P^{0.11} - 40$ 

where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

### D.1.2 Emissions Limitations

The hot ingot oxide brushing system shall not operate at a throughput of greater than 300, 000 pounds of aluminum ingot per hour. Compliance with this limit satisfies the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21.

### D.1.3 Prevention of Significant Deterioration [326 IAC 2-2] [40 CFR 52.21]

Any change or modification to the hot ingot oxide brushing system, that will cause potential emissions of

- (1) 25.0 tons per year or more of particulate matter (PM), or
- (2) 15.0 tons per year or more of particulate matter less than ten (10) microns (PM10),

must have prior approval from the Office of Air Quality, pursuant to 326 IAC 2-2 (40 CFR 52.21).

### D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Minor Source Modification No.: 173-12676-00007

Page 12 of 16

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no compliance monitoring requirements for the venturi scrubber that will exhaust internally, and not directly externally.

### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

### D.1.5 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records of the throughput of the hot ingot oxide brushing system.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

### D.1.6 Reporting Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall submit Quarterly Report and Quarterly Deviation and Compliance Monitoring Report records of the throughput of the hot ingot oxide brushing system.

Date:

Page 13 of 16

Minor Source Modification No.: 173-12676-00007

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: ALCOA, Inc. - Warrick Operations Source Address: Junction State Routes 66 and 61, Newburgh, Indiana 47629-0010 Mailing Address: P.O. Box 10, Newburgh, Indiana 47629-0010 Source Modification No.: 173-16685-00007 This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval. Please check what document is being certified: 9 Test Result (specify) \_\_\_\_\_ 9 Report (specify) 9 Notification (specify) 9 Other (specify) I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature: Printed Name: Title/Position:

Date: Phone: Minor Source Modification No.: 173-12676-00007

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Minor Source Modification Quarterly Report						
Source Name: Source Address: Mailing Address: Source Modification Facility: Parameter: Limit:	P.O. Box 10, Newburgh, Ir No.:173-16685-00007 Hot Ingot Oxide Brushing Pounds of aluminum ingot	and 61, Newburgh, Indiana 4 ndiana 47629-0010 System.				
	YEAR:					
Month	Column 1	Column 2	Column 1 + Column 2			
	This Month	Previous 11 Months	12 Month Total			
Month 1						
Month 2						
Month 3						
9	No deviation occurred in the	nis quarter.				
9	Deviation/s occurred in thi Deviation has been report					
Title	/ D 'C'		<u> </u>			

ALCOA Inc. - Warrick Operations Newburgh, Indiana Permit Reviewer: Kimberly Titzer

Source Name:

Administrative Amendment 173-16685-00007 Amendment by: James Farrell

Page 15 of 16

Minor Source Modification No.: 173-12676-00007

Attach a signed certification to complete this report.

### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### MINOR SOURCE MODIFICATION QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

ALCOA, Inc. - Warrick Operations

Source Address: Junction State Routes 66 and 61, Newburg, Indiana 47629-0010 P.O. Box 10, Newburg, Indiana 47629-0010 Mailing Address: Minor Source Modification No.: 173-16685-00007 Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD Permit Requirement (specify permit condition #) **Duration of Deviation: Date of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken:** Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken:** 

ALCOA Inc. – Warrick Operations Newburgh, Indiana Permit Reviewer: Kimberly Titzer Administrative Amendment 173-16685-00007 Amendment by: James Farrell

Minor Source Modification No.: 173-12676-00007

Page 2 of 2

Page 16 of 16

Permit Requirement (specify permit condition #)				
Date of Deviation:	Duration of Deviation:			
Number of Deviations:				
Probable Cause of Deviation:				
Response Steps Taken:				
Permit Requirement (specify permit condition #)				
Date of Deviation:	Duration of Deviation:			
Number of Deviations:				
Probable Cause of Deviation:				
Response Steps Taken:				
Permit Requirement (specify permit condition #)				
Date of Deviation:	Duration of Deviation:			
Number of Deviations:				
Probable Cause of Deviation:				
Response Steps Taken:				
Form Completed By:				
Title/Position:				
Date:				
Phone:				

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Administrative Amendment to a Minor Source Modification.

### **Source Background and Description**

**Source Name:** ALCOA, Inc. - Warrick Operations

**Source Location:** Junction State Routes 66 and 61, Newburgh, IN 47629

County: Warrick
SIC Code: 3334, 3352
Operation Permit No.: T173-6627-00007
Operation Permit Issuance Date: not yet issued
Minor Source Modification No.: T173-12676-00007
Modification Issuance Date.: October 2, 2000
Administrative Amendment No.: 173-16685-00007

Administrative Amendment No.: 173-16685-000
Permit Reviewer: James Farrell

The Office of Air Quality (OAQ) has reviewed an Administrative Amendment request from Alcoa Inc. - Warrick Operations relating to the operation of the following emission units and pollution control devices:

One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) exhausting to a venturi scrubber which exhausts inside the rolling bay building, and does not exhaust directly externally.

### **History**

On October 2, 2000 ALCOA, Inc. - Warrick Operations was issued a Minor Source Modification 173-12676-00007 that permitted the following operation:

One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) exhausting to East Silo No. 2, which vents to stack number 379.2

On October 17, 2002 ALCOA, Inc. - Warrick Operations submitted a request to amend the One (1) Hot Ingot Oxide Brushing System, with a maximum capacity of 300,000 pounds of aluminum ingot per hour (1,314,000 tons per year) exhausting to East Silo No. 2, which vents to stack number 379.2, by replacing the existing cyclone with a venturi scrubber that will no longer exhaust to the atmosphere. At this time of review, ALCOA, Inc. - Warrick Operations had not been issued a Title V Operating Permit.

### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification Administrative Amendment be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for review was received on October 17, 2002.

#### **Potential To Emit**

There is no change in potential to emit from the issued Minor Source Modification 173-12676-00007 as a result of the modification to the Hot Ingot Oxide Brushing System.

### **County Attainment Status**

The source is located in Warrick County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	unclassifiable
$NO_2$	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Warrick County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Warrick County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
  Since this type of operation is not one of the 28 listed source categories under 326 IAC
  2-2 and since there are no applicable New Source Performance Standards that were in
  effect on August 7, 1980, the fugitive PM emissions are not counted toward
  determination of PSD and Emission Offset applicability.

### **Federal Rule Applicability**

There is no change in Federal Rule Applicability to the Hot Ingot Oxide Brushing System as a result of this administrative amendment.

ALCOA, Inc. - Warrick Operations Newburgh, Indiana Permit Reviewer: James Farrell

### State Rule Applicability - Individual Facilities

There is no change in State Rule Applicability to the Hot Ingot Oxide Brushing System as a result of this administrative amendment.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Based on the Venturi Scrubber exhausting internally there are no compliance monitoring requirements applicable to this source.

### Conclusion

The operation of this proposed modification shall be subject to the conditions of the attached proposed Administrative Amendment No. T173-16685-00007 and Minor Source Modification 173-12676-00007.